

**Alaska Ocean Observing System (AOOS)**  
Seward Association for the Advancement of Marine Science  
dba Alaska SeaLife Center

The Alaska Ocean Observing System's (AOOS) mission is to provide quality processed data and use these to generate information products and model forecasts to meet the needs of stakeholders including commercial, subsistence and sport fishermen, oil and gas developers, shipping interests, Alaska Native communities, resource managers, and researchers. The AOOS products will be provided through a distributed, web-based information network and span a hierarchy of spatial scales from local to regional to hemispheric, and range temporally from real-time to seasonal and longer. The focus of this proposal is on sustainability of Alaska's vast marine resources, mitigation of impacts due to coastal erosion, and improved navigation safety and search and rescue operations. New information products developed through AOOS will be accessible and understandable and encourage growth of comprehensive knowledge of ecosystem function, form and dynamics. Such knowledge gives managers and policy makers the best information available to make informed decisions regarding the preservation of ecosystem services (e.g., foods, fuels and fibers that also provide spiritual, recreational, educational, and other nonmaterial benefits to people), the challenges of climate change induced coastal erosion, and the best strategies for navigation safety and search and rescue operations.

This proposed work will enhance the present AOOS by:

- Developing statewide capacity in data management, modeling and product visualization by establishing a data management team and a Modeling and Analysis Center located at the University of Alaska Fairbanks in conjunction with the Arctic Regional Supercomputing Center.
- Implementing the Prince William Sound (PWS) Ocean Observing System as a pilot project, which includes enhanced observations, models and real-time products. This will serve as the AOOS demonstration project with techniques and knowledge that can be transferred to other regions in Alaska.
- Establishing observational components of an Arctic Ocean Observing System and initiating product development for stakeholders.
- Establishing observation components of a Bering Sea/Aleutian Islands Ocean Observing System by monitoring boundary conditions (currents and water properties) where flow enters (Amukta Pass) and exits (Bering Strait) the eastern Bering Sea, and enhancing ongoing biological monitoring activities throughout the region.
- Establishing observational components of a Gulf of Alaska Ocean Observing System (which includes Prince William Sound) by enhancing existing monitoring capacity in the Southeast and Seward/Cook Inlet/Kodiak subregions.

A comprehensive plan for development of AOOS is under construction and includes administrative infrastructure and governance, education and outreach, science advice and implementation planning, and a Data Management and Communications Committee.